Mr. Thomas Crowley
MPL Corporation
P. O. Box 220
Fairland, IN 46126

Re: 145-15928
First Significant Permit Modification to
Part 70 No.: T 145-11933-00057

Dear Mr. Crowley:

MPL Corporation was issued a Part 70 permit on September 28, 2000, for the operation of a stationary source manufacturing plastic plumbing fixtures. A letter requesting changes in some permit conditions was received on July 26, 2002. This letter requested that the VOC emissions from the cultured marble casting operation at the source be limited to 25 tons per year and the Best Available Control Technology (BACT) conditions for the cultured marble casting operation be deleted. Pursuant to 326 IAC 2-7-12(d)(1), a Significant Permit Modification can be used for "every significant change in existing monitoring Part 70 permit terms or conditions". The changes requested meet this requirement, therefore, pursuant to the provisions of 326 IAC 2-7-12 a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the deletion of the BACT requirements and the addition of the 25 tons per year VOC limit for the cultured marble casting operation at the source.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,

Originally signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
mm
cc: File - Shelby County
U.S. EPA, Region V
Shelby County Health Department
Air Compliance Section Inspector - D. J. Knotts
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

MPL Corporation
203 N. Edgerton Street
Fairland, Indiana 46126

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T145-11933-00057	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: September 28, 2000

First Significant Permit Modification No.: 145-15928	Pages Modified: 26, 27, 34
Issued by: Originally signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: October 23, 2002

consecutive month period and it is not one of the 28 listed source categories. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase the potential to emit of VOCs or any other criteria pollutant to 250 tons per year or greater, from the equipment covered in this permit, shall require prior approval from IDEM, OAQ before such change may occur.

D.1.2 Volatile Organic Compounds (VOC)

The potential to emit of VOCs from the cultured marble casting operation shall be limited to twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month, such that the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 do not apply.

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions from the cultured marble casting operation

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: MPL Corporation
Source Address: 203 N. Edgerton St., Fairland, IN 46126
Mailing Address: PO Box 220, Fairland, IN 46126
Part 70 Permit No.: T145-11933-00057
Facility: Cultured Marble Casting Operation
Parameter: Volatile Organic HAPs
Limit: PTE less than 25 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

A certification is not required for this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for Significant Permit Modification

Source Name:	MPL Corporation
Source Location:	203 N. Edgerton Street, Fairland, Indiana
County:	Shelby
Significant Permit Modification No.:	145-15928-00057
SIC Code:	3088
Permit Reviewer:	Madhurima D. Moulik

On August 28, 2002, the Office of Air Quality (OAQ) had a notice published in the Shelbyville News, Shelbyville, Indiana, stating that MPL Coporation had applied for a Significant Permit Modification. The notice also stated that OAQ proposed to issue the Significant Permit Modification and provided information on how the public could review the proposed permit modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit modification should be issued as proposed.

On September 5, 2002, MPL Corporation submitted a comment on the proposed Significant Permit Modification. The summary of the comments and corresponding responses is as follows (~~strikeout~~ to show deletions and **bold** to show additions):

Comment:

Modify Condition D.1.3 to refer correctly to “cultured marble casting operation” instead of “fiberglass operation”.

Response:

Condition D.1.3 is modified as follows:

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions from the ~~fiberglass operations~~ **cultured marble casting operation**

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	**MPL Corporation**
Source Location:	**203 N. Edgerton Street, Fairland, Indiana**
County:	**Shelby**
SIC Code:	**3088**
Operation Permit No.:	**T 145-11933-00057**
Operation Permit Issuance Date:	**September 28, 2000**
Significant Permit Modification No.:	**145-15928**
Permit Reviewer:	**Madhurima D. Moulik**

The Office of Air Quality (OAQ) has reviewed a modification application from MPL Corporation relating to the operation of a stationary source manufacturing plastic plumbing fixtures.

History

MPL Corporation was issued a Part 70 permit on September 28, 2000. On July 26, 2002, MPL Corporation submitted an application to OAQ requesting changes in permit conditions. The changes relate to the VOC emissions for the cultured marble casting operation at the source to be limited to 25 tons per year such that the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 would not apply. In addition, the changes would include the deletion of the permit conditions related to BACT for the cultured marble casting operation.

Emission Units and Pollution Control Equipment

The source consists of the following unpermitted facilities/units:

(a) Cultured Marble Casting Operation consisting of

One (1) mold preparation area

One (1) gel coat spray booth EU-2. Emissions shall be controlled by dry filters and exhausted at Stack ID# GC-1

One (1) resin casting unit EU-1, exhausted through vent S-2.

One (1) grinding finishing unit EU-3, exhausted through an internally vented filter S-3.

One (1) grinding finishing unit EU-3, exhausted through an internally vented filter S-3.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:

(b) Paved and unpaved roads and parking lots with public access.

Existing Approvals

The source was issued a Part 70 Operating Permit T 145-11933-00057 on September 28, 2000.

Enforcement Issue

(a) IDEM is aware that some equipment at the facility had been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 26, 2002.

Potential To Emit Before Control/Limitation

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	less than 100
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Styrene	greater than 10
Methyl Methacrylate	less than 10
Methyl Ethyl Ketone	less than 10
Dimethyl Phthalate	greater than 10
Toluene	less than 10

Xylene	less than 10
Cumene	less than 10
Total	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC[1]	CO	NO_X	HAPs
Cultured Marble Casting Operation	less than 100	less than 100	less than 100	less than 25	less than 100	less than 100	greater than 25
Total Emissions	less than 100	less than 100	less than 100	less than 25	less than 100	less than 100	greater than 25

[1] The source has agreed to accept a VOC emissions limit of 25 tons per year for the cultured marble casting operation in order to avoid the BACT requirements under 326 IAC 8-1-6.

County Attainment Status

The source is located in Shelby County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Shelby County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Shelby County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. 40 CFR Part 60, Subpart D does not apply because there are no boilers.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Rules)

The total source potential to emit of VOCs is less than 250 tons per twelve (12) consecutive month period and it is not one of the 28 listed source categories. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

326 IAC 2-4.1-1 (New Source Toxic Control)

This rule is not applicable to the source because, although it is a major source of HAPs as defined in the rule, the cultured marble casting operation was constructed in 1992 prior to the July 27, 1997 applicability date.

326 IAC 2-6 (Emission Reporting)

This source is located in Shelby County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (General Provisions Relating to VOC Rules: General Reduction Requirements for New Facilities)

The source has agreed to limit the VOC emissions from the cultured marble casting operation to twenty-five (25) tons per year. Therefore, the BACT requirements under 326 IAC 8-1-6 do not apply.

326 IAC 6-3-2(c) (Process Operations)

Pursuant to 326 IAC 6-3-2(c), the particulate matter emissions from the fiberglass operations shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times the fiberglass operations are in operation, in order to comply with this limit.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) The Cultured Marble Casting Operation has applicable compliance monitoring conditions as specified below:

(1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(2) Monthly inspections shall be performed of the particulate emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(3) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

(4) Visible Emissions Notations

(A) Weekly visible emission notations of the fiberglass facilities' stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(B) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(C) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(D) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(E) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(5) Record Keeping and Reporting Requirements

(A) The Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the volatile organic HAP emission limit.

(1) The usage by weight and monomer content of each resin and gel coat. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;

(2) A log of the dates of use;

(3) Method of application and other emission reduction techniques for each resin and gel coat used;

(4) The calculated total volatile organic HAP emissions from resin and gel coat use for each month.

(B) The Permittee shall maintain a log of daily over spray observations, daily and weekly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(C) The Permittee shall maintain records of daily visible emission notations of the fiberglass operations' stack exhaust.

(D) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of the permit.

(E) A quarterly summary of the information to document compliance with the twenty-five (25) tons per year VOC limit shall be submitted to the addresses listed in

Section C - General Reporting Requirements, of the permit, using the reporting forms located at the end of the permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

Conclusion

The operation of this Cultured Marble Casting Operation shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 145-15928-00057.

CHANGES TO THE PART 70 PERMIT

(1) Section D.1.2 The VOC limited potential to emit is added and the BACT requirements under 326 IAC 8-1-6 are deleted as follows (**bold** to show additions and ~~strikeout~~ to show deletions):

D.1.2 Volatile Organic Compounds (VOC) ~~[326 IAC 8-1-6]~~

The potential to emit of VOCs from the cultured marble casting operation shall be limited to twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month, such that the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 do not apply.

~~Pursuant to 326 IAC 8-1-6, the Cultured Marble Casting Operation are subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this source shall be:~~

~~Operating conditions for the Cultured Marble Casting Operation shall be the following:~~

~~(a) Use of resins and gel coats shall be limited such that the potential to emit (PTE) volatile organic HAP from resins and gel coats only shall be less than 100 tons per twelve (12) consecutive months. Compliance with this limit shall be determined based upon the following criteria:~~

~~(1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.~~

~~(2) The emission factors approved for use by IDEM, OAM for resin usage in marble casting shall be taken from the following reference: "AP-42, Table 4.4-2 Emission Factors for Uncontrolled Polyester Resin Product Fabrication Processes". The emission factor for resin usage in marble casting shall be 3% of starting monomer emitted.~~

~~(3) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA-approved form, emission factors for gel coating shall be taken from the following reference approved by IDEM, OAM: "CFA Emission Models for the Reinforced Plastics Industries", Composites Fabricators Association, February 28, 1998, and shall not exceed 32.3% styrene emitted per weight of gel coat applied. For the purposes of these emission calculations, monomer in gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.~~

(b) Gel coats used, including tooling gel coats, shall be limited to a maximum monomer content of 37 percent (37%) by weight for gel coats or their equivalent on an emissions mass basis. Monomer contents shall be calculated on a neat basis, i.e., excluding any filler. Compliance with these monomer content limits shall be demonstrated on a monthly basis.

The use of gel coats with monomer contents lower than 37%, and/or additional emission reduction techniques approved by IDEM, OAM, may be used to offset the use of gel coats with monomer contents higher than 37%. Examples of other techniques include, but are not limited to, lower monomer content gel coats, closed molding, vapor suppression, vacuum bagging, controlled spraying, or installing a control device with an overall reduction efficiency of 95%. This is allowed to meet the monomer content limits for gel coats, and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from >37% gel coat) - (Emissions from 37% gel coat) # (Emissions from 37% gel coat) - (Emissions from <37% gel coat and/or other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of gel coat used, lb or ton) * EF (Monomer emission factor for gel coat used, %);

EF, Monomer emission factor = emission factor, expressed as % styrene emitted per weight of gel coat applied, which is indicated by the monomer content, method of application, and other emission reduction techniques for each gel coat used.

(c) Optimized spray techniques according to a manner approved by IDEM shall be used for gel coats at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAM, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

(d) A one (1) quart, air atomized spray gun may be used as needed for touch-up purposes only.

(e) The listed work practices shall be followed:

(1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.

(2) Cleanup solvent containers used to transport solvent from drums to work stations shall be closed containers having soft gasketed spring-loaded closures.

(3) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.

(4) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.

~~(5) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete. The waste solvent shall be handled in such a manner that evaporation is minimized, and managed in accordance with applicable solid or hazardous waste requirements.~~

~~(6) Storage containers used to store VOC- and/or HAP- containing materials shall be kept covered when not in use.~~

(2) The Part 70 Quarterly Report is modified to reflect the twenty-five (25) tons per year limit set in Condition D.1.2.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR ~~MANAGEMENT~~ **QUALITY**
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: MPL Corporation
Source Address: 203 N. Edgerton St., Fairland, IN 46126
Mailing Address: PO Box 220, Fairland, IN 46126
Part 70 Permit No.: T145-11933-00057
Facility: Cultured Marble Casting Operation
Parameter: Volatile Organic HAPs
Limit: PTE less than ~~100~~ **25** tons per twelve (12) consecutive month period

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

(3) References to the Office of Air Management (OAM) have been changed to the Office of Air Quality (OAQ).